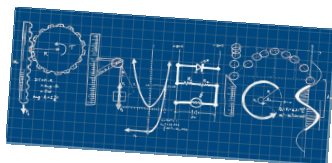
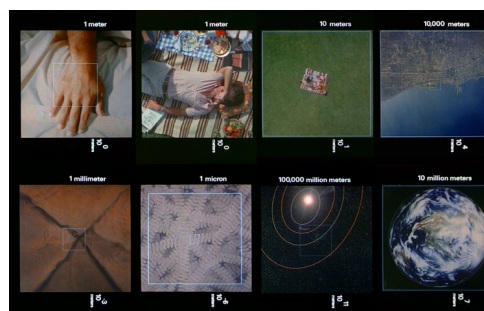


Welcome to PHYSICS!!!

SECA Physics
Wednesday 11 June 2014



H. Leslie Grebe
Room C-244



Opening Question:

Where else (besides astronomy) would scientific notation help us with really big / small numbers?

Sep 7-7:04 AM

Our 3 Questions

- * Most periods except test/project times
- * 3 Questions on the topics of the class
- * Main source of classwork points
- * I am happy to give full credit when I have no concerns about someone giving or getting help with the answers.

- Expectations

- Points

- GTKY?

You can't get your points if you don't have your **NAME!!!**

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

Computer worksheet

Think of places that are very different population from your town.

Look up the population and put it in the right row. Do 5 rows.

Then think about different sizes in space. I did the radius of the moon which is 1700 km. You could do radius of other things or look up things like distance to the sun.

If you have more time, try the problems on the back.

<http://scaleofuniverse.com/>



Extra time = Interview the teacher

Nov 16-7:37 AM

Welcome back...

H. Leslie Grebe

* Pick up:
-worksheet

<http://www.youtube.com/watch?v=3V3rmDG5J8A>



<http://www.youtube.com/watch?v=oLd1gpVa5TY>



Opening Question:

In what ways might observing the objects in the sky have helped ancient people survive?

WHERE YOU ARE

WHAT TIME IT IS

Sep 7-7:04 AM

Night Sky worksheet

Think on your own and talk with people near you to make educated guesses on these questions...

What did we find???

What is a day?

How LONG
FOR EARTH
TO SPIN
ONCE

- 1) SUN RISE / SET TO SUN RISE
 EARTH
 • ROTATE TO FACE SUN
 • NOON = SUN STRAIGHT UP
 → TO NEXT
- 2) SEASONS GO THROUGH A CYCLE
 → EARTH GOES AROUND SUN
- 3) CROPS
 DAYS, HOURS, WEEKS, MONTHS
- 4) MONTH
 MOONTH
- 5) FACING SUN = SUMMER
 TILTED AWAY = WINTER
- 6) SUNDAY - SUN
 MONDAY - MOON
 TUESDAY - TYR → MARS
 WEDNESDAY = WODAN → MERCURY
 THURSDAY = THOR → JUPITER
 FRIDAY - FRIGG = VENUS
 SATURDAY - SATURN

Nov 16-7:37 AM

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Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

1. Which amount of time corresponds to the earth spinning around once?

- ☒ a. day
- b. week
- c. month

2. Write down a day of the week and where its name comes from.

MONDAY - MOON
SUNDAY - SUN

3. Which is approximately the amount of time from one new (or full) moon to the next?

- a. week
- ☒ b. month
- c. year

MOON +

Jun 11-11:23 AM

Welcome back...

H. Leslie Grebe

* Pick up:
-worksheet

Interview the teacher



Opening Question:

If the SUN were the size of this mini soccer ball, how big would you guess the earth should be?

Sep 7-7:04 AM

Scaled-down model = all size shrunk by same factor

- size of earth? PEA SIZE
- distance from earth to sun? $1-4 \text{ FT}$

"What do you know" worksheet...

Not for points --

just let me know what you think / guess

Nov 16-7:37 AM

Scale worksheet

$10,000,000 \Rightarrow 7 \text{ zeros}$

Example: Mercury: 57,950,000 km from sun $\Rightarrow 5.8 \text{ m}$

4866 km across: $= .04 \text{ cm}$
 $100,000 \text{ km} = 1 \text{ cm}$
 $\Rightarrow 5 \text{ zeros}$

What did we find?

GUESS: EARTH $\text{PEA} \sim 4 \text{ FT}$

REALLY: TIP OF PEN 45 FT

Apr 19-7:46 AM

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You can't get your points if you don't have your **NAME!!!**

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

- 1) In our 1:10,000,000,000 scale model that we built in the hallway, how far is the earth from the sun?
- less than one meter (1 yard)
 - ☒ about 15 meters (~15 yards)
 - all the way at the far end of the hall

- 2) In our model, about how big is the earth?
- ☒ the size of the tip of a pen
 - the size of a pea
 - the size of a golf ball

- 3) In our model, what was the furthest planet that fit in our hallway? **MARS**

Jun 11-11:28 AM